THE ENERGY OBSERVER

Energy Efficiency Information for the Facility Manager

Quarterly Issue - June 2008

(Almost) No Cost Energy Conservation

The Energy Observer summarizes published material on proven energy technologies and practices, and encourages users to share experiences with generic energy products and services. This quarterly bulletin also identifies informational sources and energy training for facility managers and staff. The Energy Observer is a service of the Energy Office, Michigan Department of Labor & Economic Growth.

With energy prices rising and a slow economy limiting budgets, many facility managers may be looking for ways to reduce energy costs without a capital investment. What follows is a discussion of no-cost energy conservation measures and practices that will reduce energy consumption and start saving money (almost) immediately! These measure are not completely free since some time will be involved in planning and implementing them successfully.

Saving energy without spending money on equipment or contractor services requires engaging with the humans that use the buildings as work and activity centers and influencing their behaviors and attitudes on energy use. Most of the energy reduction techniques discussed in this issue involve changing individuals' habits and adopting appropriate energy-reducing routines and practices. Many facility managers are more familiar and comfortable with

installing equipment rather than educating building occupants about saving energy. However, these "behavior"-based measures, if implemented successfully, can reduce a significant amount of energy demand and will have nearly immediate paybacks.

Planning for behavioral measures will require that facilities personnel and management work together to implement and enforce them. Which of the following practices your facility chooses to put into place is entirely dependent upon a host of factors, including occupancy patterns, geographic location, and size of the building, to name a few. Suggestions for incentives to implement these practices can be found near the end of the article.

What employees can do

With appropriate education and policies in place, employees can...

- Turn off task lights at desks and cubicles when not needed and ensure those lights are all off at day's end.
- 2. Unplug chargers for cell phones, handheld or laptop computers, MP3 players. They still draw power when disconnected and not charging anything.
- 3. Use elevators less and take the stairs more whenever possible.
- Turn off computers at the day's end and especially before leaving for off-site work, vacation time and

- weekends, unless the Information Technology department has scheduled a special operation.
- 5. Turn off PC monitors when leaving desks for more than a few minutes.



What facilities personnel and management can do.

- Unplug drinking fountains.
 Make sure the water is still cool enough to drink comfortably before leaving it unplugged permanently.
- 2. Work toward office thermostat settings of 76°F-78°F or higher in the summer during occupied hours and 85°F or off after business hours. Work toward office thermostat settings of 68°F-70°F in the winter during occupied hours and 60°F after business hours. Gradual temperature adjustments make the transition from current temperature settings easier. Management should advise staff to dress for comfort.
- Keep window coverings/blinds open in cool and cold weather; closed in summer on the south, east and west sides of the building to reduce heat

gain from direct sunlight. This will reduce air conditioning load.

- 4. Make sure doors to the outside are kept closed. This will keep the internal temperature constant.
- 5. Make it a policy to remove personal appliances from individual offices/cubicles. Ensure that the basic appliances (refrigerator, microwave, toaster, coffee pot, etc.) are grouped in a service area and accessible to all.
- 6. Turn off individual printers, copiers, scanners, and fax machines at the day's end. Group essential office machine in several convenient locations for the staff. Review the procedures for powering down the specific equipment to make sure it is not inadvertently damaged. If it is safe to power it up and down every day, then make it a regular procedure to do so.
- 7. Turn off unneeded overhead lights during the day and ensure lights are off at day's end. Many times lights are left on unintentionally and waste electricity, as often happens with storage rooms and empty conference rooms.

Getting the word out

Two important strategies a facility manager and management can adopt to encourage conservation

is to a) make personnel aware of the rising energy costs and it's relation to the budget or bottom line, and b) reassure employees that they can make a difference by making small changes to their daily habits and routines. While it may be difficult to quantify how much each individual contributes to the overall reduction, they should know that by everyone acting together, they can have a substantial impact.

Consider using e-mail. newsletters and other visual messages to inform employees about the impact of rising energy costs and the "individual" tips in this issue. Posters, door and wall signs, as well as switch plate signage can be helpful reminders. Keep employees updated on how energy use has been reduced (if it has) by posting monthly or quarterly charts and graphs showing year-over-year energy reductions, in both consumption and dollars. This demonstrate to employees that their collective actions are making a difference.

Looking ahead

No-cost energy conservation techniques are not limited to those cited in this article. An energy conscious building staff should have no trouble spotting more energy saving opportunities, many of which will be unique to their facility. Consider forming an

"energy or green team" with representatives from facilities. business and finance departments, along with management. Meet weekly or monthly to discuss energy use issues and solutions. Recognize outstanding individual and group ideas and for achievement in energy use reduction with either commendation or more tangible awards.

Making energy conservation a higher priority in your facilities, not only through equipment purchases and maintenance, but in employee behaviors and routines, will yield substantial benefits for both long-term building owners and occupants.

More energy conservation information can be found at these websites:

http://www.eere.energy.gov/ consumer/ industry/20ways.html

http://p2pays.org/ ref/34/33609.pdf

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